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FOCUSED SITE INSPECTION PRIORITIZATION**SITE EVALUATION REPORT****HOBART BROTHERS COMPANY - LYTLE ROAD LANDFILL****Prepared by****Ohio Environmental Protection Agency****Southwest District Office****Division of Emergency and Remedial Response****401 East Fifth Street****Dayton, OH 45402**

9/8/95

Date prepared	:	September 8, 1995
County	:	Miami
USEPA ID	:	OHD004279337
Ohio ID	:	557-0990
Site Location	:	Lytle Road
Latitude	:	40° 02' 57"
Longitude	:	84° 12' 38"
Ohio EPA Site Investigator	:	Frank Zingales
U.S.G.S. Map Quadrant	:	Troy

*11/97
WFC*

FOCUSED SITE INSPECTION PRIORITIZATION REPORT

**Hobart Brothers Company - Lytle Road Landfill
Troy, Ohio**

**U.S. EPA ID: OHD 004 279 337
September 8, 1995**

Prepared by:

Frank A. Zingales

Date:

9/8/95

Frank A. Zingales
College Co-op
Division of Emergency and Remedial Response
Ohio Environmental Protection Agency
Southwest District Office

Reviewed by:

Stephen H. Martin

Date:

9/8/95

Stephen H. Martin
Group Leader
Division of Emergency and Remedial Response
Ohio Environmental Protection Agency
Southwest District Office

Approved by:

Jeanne Griffin

Date: 9/19/95

Jeanne Griffin
Site Assessment Manager
Site Assessment Section (HSM-5J)
U. S. Environmental Protection Agency

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1.0 INTRODUCTION

Under the PA/SI Cooperative Agreement, V005944-01-A, the Ohio Environmental Protection Agency (OEPA) has evaluated the Hobart Brothers Company-Lytle Road Landfill in Miami County, Ohio as a potential candidate for the National Priorities List (NPL) and has prepared this site evaluation report. Using the Hazard Ranking System II (HRS), OEPA performed focused site inspection prioritization (FSIP) activities for the site to determine to what extent it poses a threat to human health and the environment. This report presents the results of OEPA's evaluation and summarizes the site conditions and targets pertinent to the migration and exposure pathways associated with the site. Information was obtained from the preliminary assessment (PA) and site inspection (SI) reports for the site, OEPA files, a March 31, 1995, site reconnaissance, OEPA sampling data, and interviews conducted with David Harrison, Director - Product Integrity, Safety and Environment, and Michele Elliot, Environmental and Industrial Hygiene Consultant of the facility.

This report has seven sections including this introduction. Section 2.0 describes the site and provides a site history, Section 3.0 describes previous investigations, Section 4.0 describes sampling locations, Section 5.0 provides a discussion of analytical results, Section 6.0 describes migration and exposure pathways, and Section 7.0 summarizes conditions at the site. The appendices to the report contain the photographs taken during the reconnaissance, OEPA analytical results, and the HRS scoresheets.

2.0 SITE DESCRIPTION AND HISTORY

This section describes the Lytle Road Landfill and discusses its operating history. The discussion is primarily based on the SI by Ecology & Environment (E&E) conducted on March 1, 1983, and information obtained during the site reconnaissance. The site representative was not involved with the past landfill operations and was not able to give an accurate account of past waste practices.

2.1 Site Description

The Lytle Road Landfill is owned by Hobart Brothers Company and encompasses approximately 1.5 acres (E&E, 1984). The site is situated in a suburban/light industrial area and is bordered to the north by a vacant house and Lytle Road, to the east by B&O Railroad, to the west by a drainage ditch and a baseball diamond, and to the south by a gate which restricts access to the adjacent property. Directly across Lytle Road lies Hines Builders, which is a construction company. East of the B&O Railroad tracks lies Earnhart Petroleum, which is a petroleum distribution center, and a field used for farming (see accompanying site map) (OEPA, 1995b).

The vacant house and **NON- RESPONSIVE** of the landfill and are owned by Hobart Brothers Company (see photographs 4 and 5).

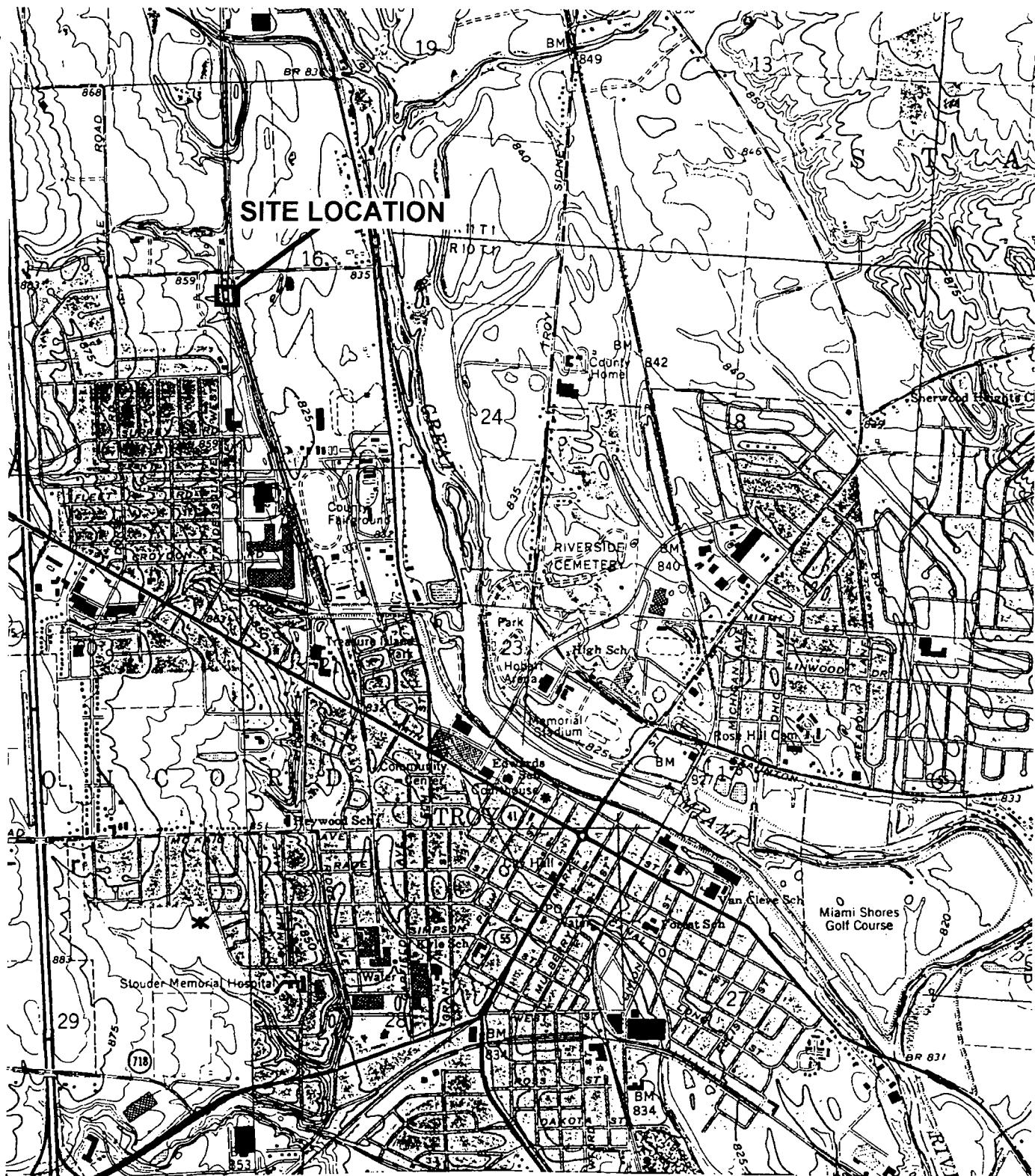
2.2 Site History

The Lytle Road Landfill site was in operation from 1973 to 1980 and was used to dispose of wastes generated by Hobart Brother's Filler Metal Division (E&E, 1984). These wastes included welding flux, iron oxide scale, paint sludges, pickling liquor, wet lube sludge, and wide dry lube sludge. Table 1 gives a brief description of the above wastes.

Table 1: Waste Description

WASTE:	DESCRIPTION:
welding flux	excess material from electrode creation
iron oxide scale	iron oxide (rust) stripped from raw steel
paint sludges	excess/over-spray from paint booths
pickling liquor	wastes from hydrochloric acid bath
wet lube sludge	water based material, used as a lubricant
wide dry lube sludge	material, basic in nature, used as a lubricant

NON-RESPONSIVE



Other wastes disposed of in the landfill included construction debris, baghouse dust, trash from the facility, demolition material, and sludges from Hobart's wastewater treatment plant (OEPA, 1995b). Baghouse dust was a waste generated from an airborne particulate collection system. The system would collect airborne particulates (metals and dust) from within the facility for disposal purposes. Sludges were periodically removed from Hobart's wastewater treatment facility settling tanks and were believed to contain heavy metals.

Wastes were deposited into unlined, shallow pits of unknown depth (OEPA, 1995b). Numerous pits were excavated in areas of the site for disposal purposes. No record exists for the exact types, quantities, and nature of wastes deposited at the Lytle Road Landfill site.

In August of 1979, the Miami County Health Department and OEPA inspected the Lytle Road Landfill in response to a complaint. It was noted that some of the pits were excavated into buried rubbish areas. As a result, water could rapidly percolate through existing wastes and promote the migration of contaminants into groundwater. At this time, it was recommended by OEPA that all pits be filled with clay, capped with soil, and vegetated (OEPA, 1995e).

The SI indicated that Ace Liquid Haulers removed drummed paint sludges from the landfill. However, neither OEPA nor Hobart Brothers Company have information to confirm this.

The site representative estimated that landfill operations ceased in 1980, after which the landfill was capped with soil, graded, and then vegetated.

Hobart Brothers Company owns the vacant house and **NON- RESPONSIVE** of the landfill (OEPA, 1995b). The house was purchased by Hobart in 1992 and has been vacant for three years. **NON- RESPONSIVE** (OEPA, 1995d).

2.3 Current Conditions

A site reconnaissance was performed on March 31, 1995 by OEPA, Division of Emergency and Remedial Response (DERR). The Lytle Road Landfill site was substantially vegetated with a few areas of exposed demolition material. The eastern side of the landfill was steeply sloped and displayed signs of erosion (see photographs 7 and 8). Exposed demolition material and municipal wastes were observed along this slope of the landfill. The northern portion of the site had mounded piles of soil covered with thick grasses and bushes, while the southern portion displayed dumpings of assorted trash and organic debris (see photographs 2 and 10). The site was easily accessible from Lytle Road since no fence surrounds the site (see photograph 1).

3.0 PREVIOUS INVESTIGATIONS

The site was initially evaluated in the form of a PA in March of 1983 by OEPA and given a low priority. Next, an SI was completed in August of 1984 by E&E and given a high priority.

4.0 SAMPLING LOCATIONS AND PROCEDURES

Ohio EPA personnel collected soil samples and off-site groundwater samples on May 30, 1994 (Figures 3 and 4). Standard Quality Assurance and Quality Control (QA/QC) procedures for Site Investigation field activities were followed during the investigation. These procedures, including sample collection, packaging, shipping, and equipment decontamination, are documented in the Quality Assurance Project Plan (QAPP) for Region 5 Superfund Site Inspection Activities for Ohio EPA and Ohio EPA Field Standard Operating Procedures.

4.1 Soil Sample Locations

Four soil samples including one duplicate were collected to characterize and identify contamination in the area of the former landfill. The samples were all taken within two feet of the surface. Two samples were taken on the southwest end of the landfill, one on the northeast slope of the landfill, and one at the southeast corner of the landfill. See Figure 1 for soil sampling locations.

4.2 Groundwater Sample Locations

One downgradient commercial well and two downgradient residential wells were sampled to determine if off-site groundwater contamination exists. **NON- RESPONSIVE**

NON- RESPONSIVE

5.0 DISCUSSION OF ANALYTICAL RESULTS

Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (semi-VOCs), pesticides, PCBs, and Target Analytical List (TAL) metals. Complete analytical results of this investigation are contained in Appendix B. Significant findings based on these data are summarized in Table 2.

5.1 Soil Samples

TAL metal concentrations were elevated above background in soil samples collected from around the landfill. Arsenic was detected at 33.2 parts per million (ppm), and nickel was detected at 302 ppm in the sample obtained from the southeast corner of the landfill. Also, chromium was detected at 349 ppm in the sample obtained from the northeast corner of the landfill. See Table 2 for further selected soil contaminants.

5.2 Groundwater Samples

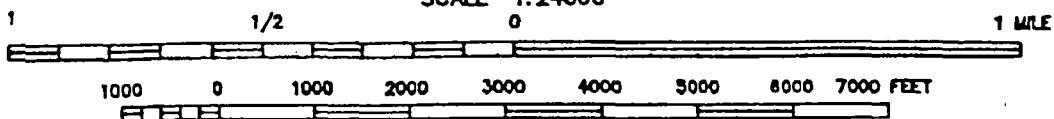
NON- RESPONSIVE

However, this contamination could not be attributed to the site since it was not detected in on-site soil samples.

NON-RESPONSIVE



SCALE 1:24000



SCALE: 1" = 2,000'



Figure 4: Groundwater Sample Locations

Hobart Brothers Company
Lytle Road Landfill

● HO-GW-01: Groundwater Sample

SOURCE: MODIFIED FROM USGS,
TROY, OHIO, QUADRANGLE, 1982

Table 2: Selected Soil Sample Results

CONTAMINANT	SAMPLE ID #	CONCENTRATION(PPM)
Anthracene	HO-SO-09	0.006
Arsenic	HO-SO-07	33.2
Barium	HO-SO-07	392
Benz(a)anthracene	HO-SO-07	0.046
Benzene	HO-SO-09	0.002
Benzo(j,k)fluorene	HO-SO-08	0.032
Benzo(k)fluoranthene	HO-SO-07	0.72
3,4-Benzofluoranthene	HO-SO-07	1.20
Beryllium	HO-SO-09	1.30
Chloromethane	HO-SO-06	0.032
Chromium	HO-SO-06	349
Chrysene	HO-SO-07	0.099
Cobalt	HO-SO-06	68.4
Copper	HO-SO-06	260
Dibenzofuran	HO-SO-08	0.007
Ethylbenzene	HO-SO-07	0.012
Iron	HO-SO-06	168000
Lead	HO-SO-07	149
Manganese	HO-SO-06	61700
Mercury	HO-SO-07	0.07
2-Methyl Napthalene	HO-SO-08	0.029
Nickel	HO-SO-06	302
Phenanthrene	HO-SO-08	0.048
Pyrene	HO-SO-08	0.026
Selenium	HO-SO-09	0.69
Silver	HO-SO-06	23.8
Thallium	HO-SO-06	1.6
Vandium	HO-SO-06	110
m-Xylene	HO-SO-07	.130

Note: Listed concentrations were three times greater than background concentrations.

6.0 MIGRATION AND EXPOSURE PATHWAYS

This section describes the migration and exposure pathways associated with the Lytle Road Landfill site. Section 6.1 describes the surface water pathway. Section 6.2 describes the groundwater pathway. Section 6.3 discusses the air migration pathway. Section 6.4 discusses the soil exposure pathway.

6.1 SURFACE WATER MIGRATION PATHWAY

This section discusses the migration route, surface water releases, and targets associated with surface water migration pathway at the site.

6.1.1 Migration Routes

The potential for surface water contamination exists because of the close proximity of the perennial flowing drainage ditch bordering the western edge of the site (see photographs 15 & 16). The ditch is approximately 1.5 miles long and flows south towards the city of Troy until it discharges into the Great Miami River (OEPA, 1995c). Contamination could migrate off-site via overland flow through this ditch and reach the Great Miami River.

The site is not located in the floodplain of the Great Miami River (FEMA, 1984). However, a site visit performed by OEPA on August 9, 1995 revealed much of the site to be covered with water (OEPA, 1995f).

6.1.2 Surface Water Releases

No releases from the Lytle Road Landfill site to surface water have been documented. However, due to the close proximity of the drainage ditch, contaminants in surface soils could migrate via overland flow into the Great Miami River.

6.1.3 Targets

No surface water intakes for drinking water exist within 15 miles downstream from the confluence of the drainage ditch and the Great Miami River (OEPA, 1995a). However, the Great Miami River is used for recreational purposes, including fishing. An estimated 8,280 pounds of fish are harvested and consumed annually within 15 miles downstream of the confluence (OEPA, 1995g). No endangered species exist within 15 miles downstream of the confluence (OEPA, 1995a). An estimated six miles of wetland habitat exist along the river within 15 miles downstream from the confluence (U.S. DOI, 1988).

6.2 GROUNDWATER MIGRATION PATHWAY

This section discusses geology and soils, groundwater releases, and targets associated with the groundwater migration pathway.

6.2.1 Geology and Soils

The site is characterized by soils of the Miamian-Celina association which were formed in glacial till. These soils are moderately to well drained (ODNR, 1978).

The city of Troy's water supply is obtained from outwash sands and gravels filling the Great Miami River buried valley, which is known as the Great Miami Buried Valley Aquifer. The deposits of sand and gravel are capable of transmitting groundwater from 600 to 500,000 gallons per day per foot, depending on the grain size distributions in water bearing layers (ODNR, 1986).

The glacial deposits of the region are underlain by shale and limestone of the Richmond Formation of the Ordovician Period (ODNR, 1920).

6.2.2 Groundwater Releases

No groundwater releases have been documented.

6.2.3 Targets

Groundwater obtained from the Great Miami Buried Valley Aquifer is the main source of drinking water in the area. Approximately 24,964 people use groundwater from municipal water supply systems or private wells that draw water from within the 4-mile target distance limit of the Lytle Road Landfill site (OEPA, 1995a).

NON- RESPONSIVE



The system serves 20,250 people and is capable of drawing 5.14 million gallons of water per day from the Great Miami Buried Valley Aquifer (OEPA, 1995a).

6.3 AIR EXPOSURE PATHWAY

No releases of hazardous substances from the site to the air have been documented. No airborne particulates were observed during the reconnaissance.

6.4 SOIL EXPOSURE PATHWAY

The risk of soil exposure exists because the site is easily accessible from Lytle Road and is unfenced. No residences, schools, or day-care facilities lie within 200 feet of areas of potential contamination. However, a baseball field borders the western edge of the site. During the OEPA site reconnaissance, a substantial vegetative cover was observed. This is believed to limit the risk of soil exposure (OEPA, 1995b).

7.0 SUMMARY

Although sample analytical results suggest that no contaminants have migrated from the Lytle Road Landfill, the potential for contaminant migration exists. The lack of a proper liner beneath the site and the site's close proximity to the highly permeable Great Miami Buried Valley Aquifer, make contaminant release to groundwater possible. **NON- RESPONSIVE**

[REDACTED] Contaminants were detected in local drinking water wells, however, this contamination could not be attributed to the site since it was not detected in on-site soil samples.

The potential for contaminant release to surface water exists because of the 1.5 mile long drainage ditch which discharges into the Great Miami River. However, no release of contaminants to surface water has been documented. The Great Miami River is a fishery, and people consuming fish downstream from the site are potential targets.

Analytical results from samples showed contamination in on-site soils. A potential exists for exposure to these soils due to the close proximity of an adjacent baseball field and unrestricted access to the site.

Exposure via the air pathway appears to be unlikely. The site is well-vegetated and highly compacted. No release of hazardous substances from the site to the air have been documented.

References

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- Ohio Department of Natural Resources (ODNR). 1978. *Soil Survey of Miami County.*
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- OEPA. 1995a. Geographical information system.
- OEPA. 1995b. Field logbook notes taken during site reconnaissance at Lytle Road landfill site. Prepared by Frank Zingales, OEPA.
- OEPA. 1995c. Reconnaissance and interview with Miami County Engineer Office regarding open ditch bordering Lytle Road landfill site. Prepared by Frank Zingales, OEPA.
- OEPA. 1995d. Telephone conversation regarding residential well north of Lytle Road landfill site. Between Frank Zingales and representative of Stoltz Drilling Company.
- OEPA. 1995e. Southwest District File Review.
- OEPA. 1995f. Field logbook notes taken during site reconnaissance at Lytle Road landfill. Prepared by Laura Kuederle, OEPA.
- OEPA. 1995g. Internal memorandum regarding calculation of fish consumption from the Great Miami River. From Frank Zingales to Steve Martin.
- U. S. Department of the Interior (U. S. DOI), 1988. National wetland inventory maps for Tipp City, Ohio; Troy, Ohio.
- U. S. Geological Survey (USGS). Topographic map for Troy, Ohio Quadrangle. 7.5-Minute Series.

APPENDIX A

SITE RECONNAISSANCE PHOTOGRAPHS

HOBART BROTHERS COMPANY-LYTLE ROAD LANDFILL
TROY, OHIO

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



1. Site Name: Lytle Rd. LF Orientation: South
Description: Panoramic view of site.



2. Site Name: Lytle Rd. LF Orientation: West
Description: Mounded piles of soil.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



3. Site Name: Lytle Rd. LF Orientation:N/A
Description: Area void of vegetation.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995

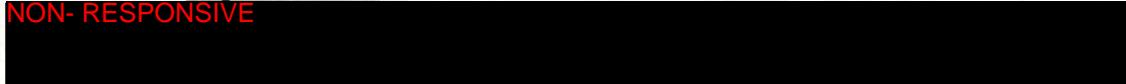


4. Site Name: Lytle Rd. LF Orientation: North
Description: View of vacated house from site.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995

NON- RESPONSIVE



5. Site Name: Lytle Rd. LF Orientation:N/A
NON- RESPONSIVE
- 

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



6. Site Name: Lytle Rd. LF Orientation: South
Description: View of northern slope of LF.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



7. Site Name: Lytle Rd. LF Orientation: West
Description: Erosional channeling on eastern slope of LF.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



8. Site Name: Lytle Rd. LF Orientation: West
Description: Erosion on eastern slope of LF.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



9. Site Name: Lytle Rd. LF Orientation: West
Description: Erosional channeling on eastern slope.



10. Site Name: Lytle Rd. LF Orientation: West
Description: Assorted debri on eastern slope of LF.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



11. Site Name: Lytle Rd. LF Orientation: East
Description: B&O railroad tracks bordering LF. Earnhart Petroleum in background.



12. Site Name: Lytle Rd. LF Orientation: East
Description: B&O tracks. Field used for farming in background.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995

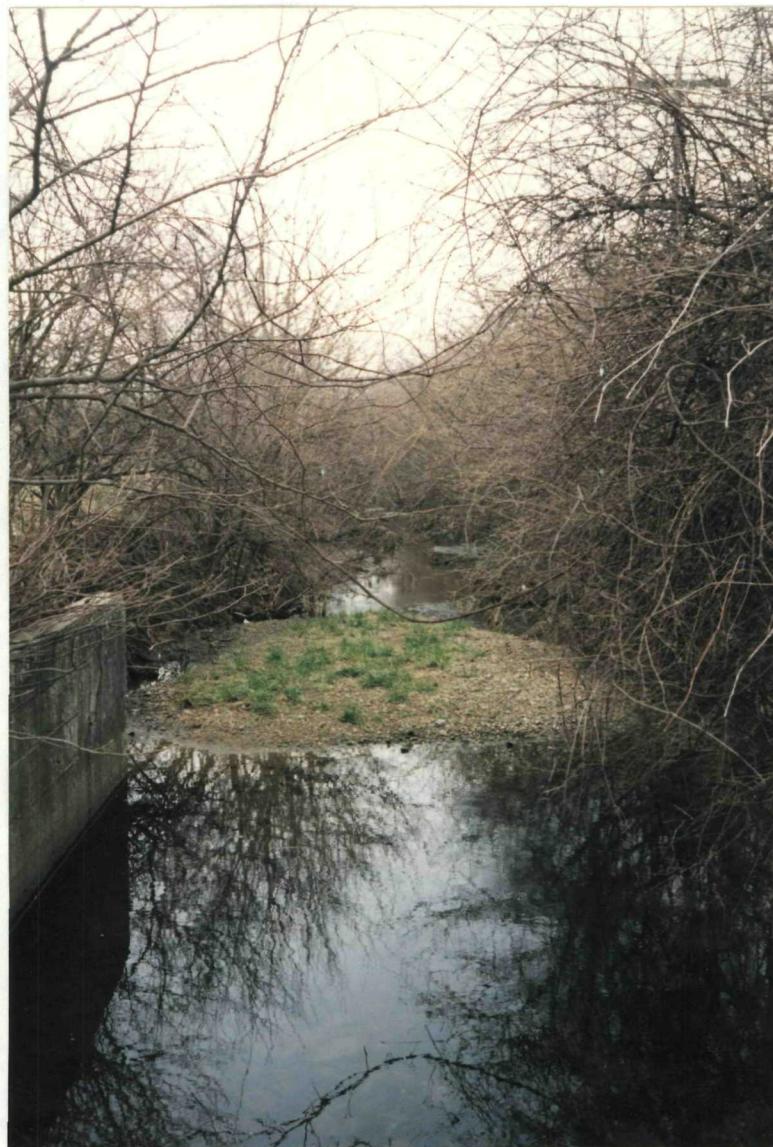


13. Site Name: Lytle Rd. LF Orientation: West
Description: NON- RESPONSIVE



14. Site Name: Lytle Rd. LF Orientation: West
Description: Baseball field which borders western edge of LF.

Hobart Brothers Company
Lytle Road Landfill Photographic Log
All photographs taken on March 31, 1995



15. Site Name: Lytle Rd. LF Orientation: South
Description: Drainage ditch which borders western edge of LF.

Hobart Brothers Company
Lytle Road Landfill Photographic Log

All photographs taken on March 31, 1995



16. Site Name: Lytle Rd. LF Orientation: West
Description: Culvert from which drainage ditch originates.

APPENDIX B

ANALYTICAL RESULTS

**HOBART BROTHERS COMPANY-LYTLE ROAD LANDFILL
TROY, OHIO**

Appendix B

Lytle Road Landfill Groundwater Sample Results

B1

CLP SAMPLE NUMBERS	HOGW01	HOGW02	HOGW03	HOGW04	WJR008	FIELD BLANK	TRIP BLANK
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	03/01/94	05/30/95	05/30/95
TIME SAMPLE COLLECTED	14:30	15:20	13:37	14:00	UNAVAILABLE	UNAVAILABLE	UNAVAILABLE
WELL DEPTH	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	NA	NA
SAMPLE DESCRIPTION	RESIDENTIAL WELL	RESIDENTIAL WELL	RESIDENTIAL WELL	DUPLICATE	MIAMI COUNTY INCINERATOR SITE		
QA/QC (if applicable)	MS/MSD			DUPLICATE OF HOGW03			BACKGROUND

COMPOUND DETECTED (ug/l)	CRQL						
chloromethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
bromomethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
vinyl chloride	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
chloroethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
methylene chloride	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
acetone	10 ug/L	5.7	4.4J	5.0U	5.0U	10U	1.0U
carbon disulfide	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,1-dichloroethene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,1-dichloroethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-dichloroethene (total)	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
chloroform	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-dichloroethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
2-butanone	10 ug/L	5.0U	5.0U	5.0U	5.0U	10U	1.0U
1,1,1-trichloroethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
carbon tetrachloride	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
bromodichloromethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-dichloropropane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
cis-1,3-dichloropropene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
trichloroethene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
dibromochloromethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,1,2-trichloroethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
benzene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
trans-1,3-dichloropropene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
bromoform	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
4-methyl-2-pentanone	10 ug/L	5.0U	5.0U	5.0U	5.0U	10U	1.0U
2-hexanone	10 ug/L	5.0U	5.0U	5.0U	5.0U	10U	1.0U
tetrachloroethene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1,1,2,2-tetrachloroethane	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
toluene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
chlorobenzene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
ethyl benzene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
styrene	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
xylenes (total)	10 ug/L	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U

SEMI-VOLATILE ORGANIC COMPOUNDS	CRQL						
phenol	10 ug/L	5U	5U	5U	5U	10U	
bis(2-chloroethyl)ether	10 ug/L	5U	5U	5U	5U	NA	
2-chlorophenol	10 ug/L	5U	5U	5U	5U	10U	
1,3-dichlorobenzene	10 ug/L	5U	5U	5U	5U	10U	
1,4-dichlorobenzene	10 ug/L	5U	5U	5U	5U	10U	
1,2-dichlorobenzene	10 ug/L	5U	5U	5U	5U	10U	
2-methylphenol	10 ug/L	5U	5U	5U	5U	10U	
2,2-oxybis(1-chloropropane)	10 ug/L	5U	5U	5U	5U	10U	
4-methylphenol	10 ug/L	5U	5U	5U	5U	10U	
n-nitroso-di-n-dipropylamine	10 ug/L	5U	5U	5U	5U	10U	
hexachloroethane	10 ug/L	5U	5U	5U	5U	10U	
nitrobenzene	10 ug/L	5U	5U	5U	5U	10U	
isophorone	10 ug/L	5U	5U	5U	5U	10U	

Appendix B

Lytle Road Landfill Groundwater Sample Results

B2

CLP SAMPLE NUMBERS	HOGW01	HOGW02	HOGW03	HOGW04	WJR008	FIELD BLANK	TRIP BLANK
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	03/01/94	05/30/95	05/30/95
TIME SAMPLE COLLECTED	14:30	15:20	13:37	14:00	UNAVAILABLE	UNAVAILABLE	UNAVAILABLE
WELL DEPTH	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	NA	NA
SAMPLE DESCRIPTION	RESIDENTIAL WELL	RESIDENTIAL WELL	RESIDENTIAL WELL	DUPLICATE	MIAMI COUNTY INCINERATOR SITE		
QA/QC (if applicable)	MS/MSD			DUPLICATE OF HOGW03			BACKGROUND

COMPOUND DETECTED (ug/kg)	CRQL						
2-nitrophenol	10 ug/L	5U	5U	5U	5U	50U	
2,4-dimethylphenol	10 ug/L	5U	5U	5U	5U	10U	
bis(2-chloroethoxy)methane	10 ug/L	5U	5U	5U	5U	10U	
2,4-dichlorophenol	10 ug/L	5U	5U	5U	5U	10U	
1,2,4-trichlorobenzene	10 ug/L	5U	5U	5U	5U	10U	
naphthalene	10 ug/L	5U	5U	5U	5U	10U	
4-chloroaniline	10 ug/L	5U	5U	5U	5U	10U	
hexachlorobutadiene	10 ug/L	5U	5U	5U	5U	10U	
4-chloro-3-methylphenol	10 ug/L	5U	5U	5U	5U	10U	
2-methylnaphthalene	10 ug/L	5U	5U	5U	5U	10U	
hexachlorocyclopentadiene	10 ug/L	5U	5U	5U	5U	10U	
2,4,6-trichlorophenol	10 ug/L	5U	5U	5U	5U	10U	
2,4,5-trichlorophenol	25 ug/L	20U	20U	20U	20U	10U	
2-chloronaphthalene	10 ug/L	5U	5U	5U	5U	10U	
2-nitroaniline	25 ug/L	20U	20U	20U	20U	50U	
dinitethylphthalate	10 ug/L	5U	5U	5U	5U	10U	
acenaphthylene	10 ug/L	5U	5U	5U	5U	10U	
2,6-dinitrotoluene	10 ug/L	5U	5U	5U	5U	10U	
3-nitroaniline	25 ug/L	20U	20U	20U	20U	50U	
acenaphthene	10 ug/L	5U	5U	5U	5U	10U	
2,4-dinitrophenol	25 ug/L	20U	20U	20U	20U	50U	
4-nitrophenol	25 ug/L	20U	20U	20U	20U	10U	
dibenzofuran	10 ug/L	5U	5U	5U	5U	10U	
2,4-dinitrotoluene	10 ug/L	5U	5U	5U	5U	10U	
diethylphthalate	10 ug/L	5U	5U	5U	5U	10U	
4-chlorophenyl-phenyl ether	10 ug/L	5U	5U	5U	5U	10U	
fluorene	10 ug/L	5U	5U	5U	5U	10U	
4-nitroaniline	25 ug/L	20U	20U	20U	20U	50U	
4,6-dinitro-2-methylphenol	25 ug/L	20U	20U	20U	20U	10U	
n-nitrosodiphenylamine	10 ug/L	5U	5U	5U	5U	10U	
4-bromophenyl-phenyl ether	10 ug/L	5U	5U	5U	5U	10U	
hexachlorobenzene	10 ug/L	5U	5U	5U	5U	10U	
pentachlorophenol	25 ug/L	20U	20U	20U	20U	50U	
phenanthrene	10 ug/L	5U	5U	5U	5U	10U	
anthracene	10 ug/L	5U	5U	5U	5U	10U	
carbazole	10 ug/L	5U	5U	5U	5U	10U	
di-n-butylphthalate	10 ug/L	5U	5U	5U	5U	10U	
fluoranthene	10 ug/L	5U	5U	5U	5U	10U	
pyrene	10 ug/L	5U	5U	5U	5U	10U	
butylbenzylphthalate	10 ug/L	5U	5U	5U	5U	10U	
3,3-dichlorobenzidine	10 ug/L	5U	5U	5U	5U	20U	
benzo(a)anthracene	10 ug/L	5U	5U	5U	5U	10U	
chrysene	10 ug/L	5U	5U	5U	5U	10U	
bis(2-ethylhexyl)phthalate	10 ug/L	5U	5U	1J	5U	10U	
di-n-octylphthalate	10 ug/L	5U	5U	5U	5U	10U	
benzo(b)fluoranthene	10 ug/L	5U	5U	5U	5U	10U	
benzo(k)fluoranthene	10 ug/L	5U	5U	5U	5U	10U	
benzo(a)pyrene	10 ug/L	5U	5U	5U	5U	10U	
indeno(1,2,3-cd)pyrene	10 ug/L	5U	5U	5U	5U	10U	
dibenzo(a,h)anthracene	10 ug/L	5U	5U	5U	5U	10U	
benzo(g,h,i)perylene	10 ug/L	5U	5U	5U	5U	10U	

Appendix B

Lytle Road Landfill Groundwater Sample Results

B3

CLP SAMPLE NUMBERS	HOGW01	HOGW02	HOGW03	HOGW04	WJR008	FIELD BLANK	TRIP BLANK
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	03/01/94	05/30/95	05/30/95
TIME SAMPLE COLLECTED	14:30	15:20	13:37	14:00	UNAVAILABLE	UNAVAILABLE	UNAVAILABLE
WELL DEPTH	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	NA	NA
SAMPLE DESCRIPTION	RESIDENTIAL WELL	RESIDENTIAL WELL	RESIDENTIAL WELL	DUPLICATE	MIAMI COUNTY INCINERATOR SITE		
QA/QC (if applicable)	MS/MSD			DUPLICATE OF HOGW03			BACKGROUND

COMPOUND DETECTED (ug/kg)	CRQL						
PESTICIDES/PCBS							
alpha-BHC	0.05 ug/L	0.010U	0.010U	0.010U	0.010U	0.050UJ	
beta-BHC	0.05 ug/L	0.010U	0.010U	0.010U	0.0035JP	0.050UJ	
delta-BHC	0.05 ug/L	0.010U	0.010U	0.010U	0.010U	0.050UJ	
gamma-BHC (Lindane)	0.05 ug/L	0.010U	0.010U	0.010U	0.010U	0.050UJ	
heptachlor	0.05 ug/L	0.010U	0.010U	0.010U	0.010U	0.050UJ	
aldrin	0.05 ug/L	0.010U	0.010U	0.010U	0.010U	0.050UJ	
heptachlor epoxide	0.05 ug/L	0.0028JBP	0.0048JBP	0.010U	0.010U	0.050UJ	
endosulfan I	0.05 ug/L	0.010U	0.010U	0.010U	0.010U	0.050UJ	
dieldrin	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
4,4-DDE	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
Endrin	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
Endosulfan II	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
4,4-DDD	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
Endosulfan sulfate	0.10 ug/L	0.0029J	0.020U	0.020U	0.020U	0.10UJ	
4,4-DDT	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
methoxychlor	0.50 ug/L	0.10U	0.10U	0.10U	0.10U	0.50UJ	
endrin ketone	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
endrin aldehyde	0.10 ug/L	0.020U	0.020U	0.020U	0.020U	0.10UJ	
alpha-chlordane	0.50 ug/L	0.010U	0.010U	0.010U	0.010U	0.50UJ	
gamma-chlordane	0.50 ug/L	0.010U	0.010U	0.010U	0.010U	0.50UJ	
toxaphene	5.0 ug/L	1.0U	1.0U	1.0U	1.0U	1.0UJ	
aroclor-1016	1.0 ug/L	0.20U	0.20U	0.20U	0.20U	0.50UJ	
aroclor-1221	2.0 ug/L	0.20U	0.20U	0.20U	0.20U	0.50UJ	
aroclor-1232	1.0 ug/L	0.40U	0.40U	0.40U	0.40U	0.50UJ	
aroclor-1242	1.0 ug/L	0.20U	0.20U	0.20U	0.20U	0.50U	
aroclor-1248	1.0 ug/L	0.20U	0.20U	0.20U	0.20U	0.50U	
aroclor-1254	1.0 ug/L	0.20U	0.20U	0.20U	0.20U	1.0U	
aroclor-1260	1.0 ug/L	0.20U	0.20U	0.20U	0.20U	1.0U	

ANALYTE DETECTED (mg/kg)	CRQL						
TAL METALS/CYANIDE							
aluminum	200 ug/l	22.5B	16.8U	16.8U	18.0B	UNAVAILABLE (1)	
antimony	60 ug/l	16.1U	16.1U	16.1U	16.1U	0.006 (1)	
arsenic	10 ug/l	0.80U	2.2B	0.80U	0.80U	UNAVAILABLE (1)	
barium	200 ug/l	77.9B	213	112B	111B	2 (1)	
beryllium	5 ug/l	0.30U	0.30U	0.30U	0.30U	0.004 (1)	
cadmium	5 ug/l	1.6U	1.6U	1.6U	1.6U	0.005 (1)	
calcium	5000 ug/l	92300	99000	105000	105000	UNAVAILABLE (1)	
chromium	10 ug/l	4.9U	4.9U	4.9U	4.9U	0.1 (1)	
cobalt	50 ug/l	5.9U	5.9U	5.9U	5.9U	UNAVAILABLE (1)	
copper	25 ug/l	22.0B	13.1B	30.1	32.2	1.3 (1)	
iron	100 ug/l	21.4U	21.4U	21.4U	21.4U	UNAVAILABLE (1)	
lead	3 ug/l	2.5B	0.60U	0.60U	0.60U	0 (1)	
magnesium	5000 ug/l	34300	37200	34900	34900	UNAVAILABLE (1)	
manganese	15 ug/l	0.64B	1.9B	0.60U	0.72B	UNAVAILABLE (1)	
mercury	0.2 ug/l	0.03U	0.03U	0.03U	0.03U	0.002 (1)	
nickel	40 ug/l	3.2U	3.2U	3.2U	3.2U	0.1 (1)	
potassium	5000 ug/l	1640B	1820B	3780B	3750B	UNAVAILABLE (1)	
selenium	5 ug/l	1.2B	0.80U	0.80U	0.80U	UNAVAILABLE (1)	
silver	10 ug/l	2.6U	2.6U	2.6U	2.6U	0.05 (1)	

Appendix B

Lytle Road Landfill Groundwater Sample Results

B4

CLP SAMPLE NUMBERS	HOGW01	HOGW02	HOGW03	HOGW04	WJR008	FIELD BLANK	TRIP BLANK
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	03/01/94	05/30/95	05/30/95
TIME SAMPLE COLLECTED	14:30	15:20	13:37	14:00	UNAVAILABLE	UNAVAILABLE	UNAVAILABLE
WELL DEPTH	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	NA	NA
SAMPLE DESCRIPTION	RESIDENTIAL WELL	RESIDENTIAL WELL	RESIDENTIAL WELL	DUPPLICATE	MIAMI COUNTY INCINERATOR SITE		
QA/QC (if applicable)	MS/MSD			DUPPLICATE OF HOGW03			BACKGROUND

ANALYTE DETECTED (mg/kg)						
TAL METALS/CYANIDE	CRQL					
sodium	5000 ug/l	11900	15100	15800	15800	UNAVAILABLE (1)
thallium	10 ug/l	2.4U	2.4U	2.4U	2.4U	0.0005 (1)
vanadium	50 ug/l	1.9U	1.9U	1.9U	1.9U	UNAVAILABLE (1)
zinc	20 ug/l	50.3	22	17.0B	20.2	UNAVAILABLE (1)
cyanide	10 ug/l	10.0U	10.0U	10.0U	10.0U	0.2 (1)

TAL ANALYTE QUALIFIERS	DEFINITION
B	Value is real, but is above instrument detection limit and below the contract-required detection limit.
U	Analyte was analyzed for but not detected.

TCL COMPOUND QUALIFIERS	DEFINITION
J	Indicates an estimated value
U	Compound was analyzed for but not detected.
B	Compound is found in the associated blank as well as in the sample.
D	This flag indicates all compounds identified in an analysis at a secondary dilution factor.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument.

REFERENCES	
1	U.S. EPA Drinking Water Standards and Health Advisories. November 1994.

CLP SAMPLE NUMBERS	HOSO06	HOSO07	HOSO08	HOSO09	SJ1SWL004
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	02/02/94
TIME SAMPLE COLLECTED	09.50	10.40	11.35	11:40	UNAVAILABLE
SAMPLE DESCRIPTION	NORTH-EAST CORNER OF LANDFILL	SOUTHEAST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	MAMI COUNTY INCINERATOR SITE
SAMPLE DEPTH	12"-24"	2"-8"	3"-4"	6"-8"	UNAVAILABLE
QA/QC DESCRIPTION (if applicable)	MS-NIST			DUPPLICATE OF HOSO08	BACKGROUND

COMPOUND DETECTED (ug/kg)						
VOLATILE ORGANIC COMPOUNDS	CRQL	MS-NIST	1JB	1JB	2JB	10U
chloromethane	10 ug/kg	32B	1JB	1JB	2JB	10U
bromomethane	10 ug/kg	14U	13U	12U	13U	10U
vinyl chloride	10 ug/kg	14U	13U	12U	13U	10U
chloroethane	10 ug/kg	14U	13U	12U	13U	10U
methylene chloride	10 ug/kg	9JB	4JB	16B	4JB	5.0U
acetone	10 ug/kg	13JB	14B	5JB	4JB	32U
carbon disulfide	10 ug/kg	14U	13U	12U	13U	5.0U
1,1-dichloroethene	10 ug/kg	14U	13U	12U	13U	5.0U
1,1-dichloroethane	10 ug/kg	14U	13U	12U	13U	5.0U
1,2-dichloroethene (total)	10 ug/kg	14U	13U	12U	13U	5.0U
chloroform	10 ug/kg	14U	13U	12U	13U	5.0U
1,2-dichloroethane	10 ug/kg	14U	13U	12U	13U	5.0U
2-butanone	10 ug/kg	14U	13U	12U	13U	7.6J
1,1,1-trichloroethane	10 ug/kg	14U	13U	12U	13U	5.0U
carbon tetrachloride	10 ug/kg	14U	13U	12U	13U	5.0U
bromodichloromethane	10 ug/kg	14U	13U	12U	13U	5.0U
1,2-dichloropropane	10 ug/kg	14U	13U	12U	13U	5.0U
cis-1,3-dichloropropene	10 ug/kg	14U	13U	12U	13U	5.0U
trichloroethene	10 ug/kg	14U	13U	12U	13U	5.0U
dibromochloromethane	10 ug/kg	14U	13U	12U	13U	5.0U
1,1,2-trichloroethane	10 ug/kg	14U	13U	12U	13U	5.0U
benzene	10 ug/kg	14U	13U	12U	2J	5.0U
trans-1,3-dichloropropene	10 ug/kg	14U	13U	12U	13U	5.0U
bromoform	10 ug/kg	14U	13U	12U	13U	5.0U
4-methyl-2-pentanone	10 ug/kg	14U	13U	12U	13U	50U
2-hexanone	10 ug/kg	14U	13U	12U	13U	50U
tetrachloroethene	10 ug/kg	14U	13U	12U	13U	5.0U
1,1,2,2-tetrachloroethane	10 ug/kg	14U	13U	12U	13U	5.0U
toluene	10 ug/kg	2JB	4JB	1JB	3JB	5.5
chlorobenzene	10 ug/kg	14U	13U	12U	13U	5.0U
ethyl benzene	10 ug/kg	14U	12J	12U	13U	5.0U
styrene	10 ug/kg	14U	13U	12U	13U	5.0U
xylenes (total)	10 ug/kg	14U	130	12U	13U	5.0U

SEMI-VOLATILE ORGANIC COMPOUNDS	CRQL	MS-NIST	1JB	1JB	2JB	330U
phenol	330 ug/kg	450U	430U	410U	420U	330U
bis(2-chloroethyl)ether	330 ug/kg	450U	430U	410U	420U	330U
2-chlorophenol	330 ug/kg	450U	430U	410U	420U	330U
1,3-dichlorobenzene	330 ug/kg	450U	430U	410U	420U	330U
1,4-dichlorobenzene	330 ug/kg	450U	430U	410U	420U	330U
1,2-dichlorobenzene	330 ug/kg	450U	430U	410U	420U	330U
2-methylphenol	330 ug/kg	450U	430U	410U	420U	330U
2,2-oxybis(1-chloropropane)	330 ug/kg	450U	430U	410U	420U	330U
4-methylphenol	330 ug/kg	450U	430U	410U	420U	330U
n-nitroso-di-n-dipropylamine	330 ug/kg	450U	430U	410U	420U	330U

Appendix B

Lytle Road Landfill Soil Sample Results

B6

CLP SAMPLE NUMBERS	HOSO06	HOSO07	HOSO08	HOSO09	SJ1SWL004
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	02/02/94
TIME SAMPLE COLLECTED	09:50	10:40	11:35	11:40	UNAVAILABLE
SAMPLE DESCRIPTION	NORTHEAST CORNER OF LANDFILL	SOUTHEAST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	MIAMI COUNTY INCINERATOR SITE
SAMPLE DEPTH	12"-24"	2"-8"	3"-4"	6"-8"	UNAVAILABLE
QA/QC DESCRIPTION (if applicable)	MS MFD			DUPLICATE OF HOSO08	DATA/GROUND

COMPOUND DETECTED (ug/kg)	CRQL				
SEMI-VOLATILE ORGANIC COMPOUNDS					
hexachloroethane	330 ug/kg	450U	430U	410U	420U
nitrobenzene	330 ug/kg	450U	430U	410U	420U
isophorone	330 ug/kg	450U	430U	410U	420U
2-nitrophenol	330 ug/kg	450U	430U	410U	420U
2,4-dimethylphenol	330 ug/kg	450U	430U	410U	420U
bis(2-chloroethoxy)methane	330 ug/kg	450U	430U	410U	420U
2,4-dichlorophenol	330 ug/kg	450U	430U	410U	420U
1,2,4-trichlorobenzene	330 ug/kg	450U	430U	410U	420U
naphthalene	330 ug/kg	450U	430U	410U	420U
4-chloroaniline	330 ug/kg	450U	430U	410U	420U
hexachlorobutadiene	330 ug/kg	450U	430U	410U	420U
4-chloro-3-methylphenol	330 ug/kg	450U	430U	410U	420U
2-methylnaphthalene	330 ug/kg	450U	430U	29J	20J
hexachlorocyclopentadiene	330 ug/kg	450U	430U	410U	420U
2,4,6-trichlorophenol	330 ug/kg	450U	430U	410U	420U
2,4,5-trichlorophenol	800 ug/kg	1100U	1100U	1000U	1000U
2-chloronaphthalene	330 ug/kg	450U	430U	410U	420U
2-nitroaniline	800 ug/kg	1100U	1000U	1000U	1600U
dimethylphthalate	330 ug/kg	450U	430U	410U	420U
acenaphthylene	330 ug/kg	450U	430U	410U	420U
2,6-dinitrotoluene	330 ug/kg	450U	430U	410U	420U
3-nitroaniline	330 ug/kg	1100U	1100U	1000U	1000U
acenaphthene	330 ug/kg	450U	430U	410U	420U
2,4-dinitrophenol	800 ug/kg	1100U	1100U	1000U	1600U
4-nitrophenol	800 ug/kg	1100U	1100U	1000U	1600U
dibenzofuran	330 ug/kg	450U	430U	7J	420U
2,4-dinitrotoluene	330 ug/kg	450U	430U	410U	420U
diethylphthalate	330 ug/kg	450U	430U	410U	420U
4-chlorophenyl-phenyl ether	330 ug/kg	450U	430U	410U	420U
fluorene	330 ug/kg	450U	430U	410U	420U
4-nitroaniline	800 ug/kg	1100U	1100U	1000U	1600U
4,6-dinitro-2-methylphenol	800 ug/kg	1100U	1100U	1000U	1600U
n-nitrosodiphenylamine	330 ug/kg	1100U	1100U	1000U	1000U
4-bromophenyl-phenyl ether	330 ug/kg	450U	1100U	410U	420U
hexachlorobenzene	330 ug/kg	450U	430U	410U	420U
pentachlorophenol	800 ug/kg	1100U	1100U	1000U	1600U
phenanthrene	330 ug/kg	450U	430U	48J	37J
anthracene	330 ug/kg	450U	430U	410U	6J
carbazole	330 ug/kg	450U	430U	410U	420U
di-n-butylphthalate	330 ug/kg	450U	430U	80JB	56JB
fluoranthene	330 ug/kg	18J	430U	32J	22J
pyrene	330 ug/kg	9J	430U	26J	21J
butylbenzylphthalate	330 ug/kg	450U	430U	410U	420U
3,3-dichlorobenzidine	330 ug/kg	450U	430U	410U	420U
benzo(a)anthracene	330 ug/kg	450U	46J	410U	8J
chrysene	330 ug/kg	450U	99J	410U	16J
bis(2-ethylhexyl)phthalate	330 ug/kg	450U	430U	410U	420U
di-n-octylphthalate	330 ug/kg	450U	430U	410U	420U
benzo(b)fluoranthene	330 ug/kg	450U	1200	410U	420U
benzo(k)fluoranthene	330 ug/kg	450U	720	410U	420U
benzo(a)pyrene	330 ug/kg	450U	600	410U	420U
indeno(1,2,3-cd)pyrene	330 ug/kg	450U	430U	410U	420U
dibenzo(a,h)anthracene	330 ug/kg	450U	430U	410U	420U
benzo(g,h,i)perylene	330 ug/kg	450U	430U	410U	420U

CLP SAMPLE NUMBERS	HOSO06	HOSO07	HOSO08	HOSO09	SJ1SWL004
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	02/02/94
TIME SAMPLE COLLECTED	09:50	10:40	11:35	11:40	UNAVAILABLE
SAMPLE DESCRIPTION	NORTHEAST CORNER OF LANDFILL	SOUTHEAST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	MIAMI COUNTY INCINERATOR SITE
SAMPLE DEPTH	12"-24"	2"-8"	3"-4"	6"-8"	UNAVAILABLE
QA/QC DESCRIPTION (if applicable)	MS/MSD			DUPLICATE OF HOSO08	BACKGROUND

COMPOUND DETECTED (ug/kg)						
PESTICIDES/PCBs	CRQL					
alpha-BHC	1.7 ug/kg	2.4U	2.2U	2.0U	2.1U	8.0U
beta-BHC	1.7 ug/kg	2.4U	0.86JP	2.0U	2.1U	8.0U
delta-BHC	1.7 ug/kg	2.4U	2.2U	2.0U	2.1U	8.0U
gamma-BHC (Lindane)	1.7 ug/kg	2.4U	2.2U	2.0U	2.1U	8.0U
heptachlor	1.7 ug/kg	2.4U	2.2U	0.42JP	2.1U	8.0U
aldrin	1.7 ug/kg	2.4U	4.5	2.3	2.5	8.0U
heptachlor epoxide	1.7 ug/kg	0.83J	2.2U	2.0U	0.41JP	8.0U
endosulfan I	1.7 ug/kg	2.4U	2.2U	2.0U	2.1U	8.0U
dieldrin	3.3 ug/kg	4.6U	4.2U	0.76JP	1.1JP	16U
4,4-DDE	3.3 ug/kg	0.76JP	2.6J	4.0U	0.54JP	16U
Endrin	3.3 ug/kg	4.6U	1.3JP	4.0U	4.0U	16U
Endosulfan II	3.3 ug/kg	4.6U	4.2U	4.0U	4.0U	16U
4,4-DDD	3.3 ug/kg	4.6U	2.3JP	1.5JP	4.0U	16U
Endosulfan sulfate	3.3 ug/kg	4.6U	3.4JP	4.0U	1.7JP	16U
4,4-DDT	3.3 ug/kg	4.6U	4.2U	4.0U	4.0U	16U
methoxychlor	17.0 ug/kg	24U	6.4J	20U	21U	80U
endrin ketone	3.3 ug/kg	4.6U	3.2JP	4.0U	1.7JP	16U
endrin aldehyde	3.3 ug/kg	4.6U	4.2U	1.4JP	2.2JP	16U
alpha-chlordane	1.7 ug/kg	1.1J	2.2U	0.56JP	0.84J	80U
gamma-chlordane	1.7 ug/kg	0.69JP	2.2U	0.89JP	1.2J	80U
toxaphene	170 ug/kg	240U	220U	200U	210U	160U
aroclor-1016	33 ug/kg	46U	42U	40U	40U	80U
aroclor-1221	67 ug/kg	93U	86U	81U	81U	80U
aroclor-1232	33 ug/kg	46U	42U	40U	40U	80U
aroclor-1242	33 ug/kg	93U	42U	40U	40U	80U
aroclor-1248	33 ug/kg	46U	42U	40U	40U	80U
aroclor-1254	33 ug/kg	46U	42U	40U	40U	160U
aroclor-1260	33 ug/kg	200	140	40U	40U	160U

TCL COMPOUND QUALIFIERS	DEFINITION
J	Indicates an estimated value
U	Compound was analyzed for but not detected.
B	Compound is found in the associated blank as well as in the sample.
D	This flag indicates all compounds identified in an analysis at a secondary dilution factor.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument.
P	Indicates there is a greater than 25% difference for detected concentrations between two GC columns. The lower of the two values is reported.

CLP SAMPLE NUMBERS	HOSO06	HOSO07	HOSO08	HOSO09	SJISWL004
DATE SAMPLE COLLECTED	05/30/95	05/30/95	05/30/95	05/30/95	02/02/94
TIME SAMPLE COLLECTED	09:50	10:40	11:35	11:40	UNAVAILABLE
SAMPLE DESCRIPTION	NORTHEAST CORNER OF LANDFILL	SOUTHEAST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	SOUTHWEST CORNER OF LANDFILL	MIAMI COUNTY INCINERATOR SITE
SAMPLE DEPTH	12"-24"	2"-8"	3"-4"	6"-8"	UNAVAILABLE
QA/QC DESCRIPTION (if applicable)	MS/MSD			DUPLICATE OF HOSO08	BACKGROUND

ANALYTE DETECTED (mg/kg)						
TAL METALS/CYANIDE	CRDL					
aluminum	40 mg/kg	4750	5350	1940	3420	7100 (1)
antimony	12 mg/kg	20.8U	8.6U	3.8U	5.7U	0.66 (2)
arsenic	2 mg/kg	26.3	33.2	10.4	10	7.2 (2)
barium	40 mg/kg	262	392	44.8B	85.9	580 (2)
beryllium	1 mg/kg	0.39U	0.23B	0.66B	1.3B	0.92 (2)
cadmium	1 mg/kg	2.1U	0.85U	0.38U	0.56U	0.06 (1)
calcium	1000 mg/kg	43500	34200	40700	19900	13700 (1)
chromium	2 mg/kg	349	257	7.6	13.7	54 (2)
cobalt	10 mg/kg	68.4	19.7B	3.9B	8.3B	9.1 (2)
copper	5 mg/kg	260	1600	412	818	25 (2)
iron	20 mg/kg	168000	73000	12900	21400	2600 (2)
lead	0.6 mg/kg	15.8	149	8.5	10.7	19 (2)
magnesium	1000 mg/kg	7510	8650	19900	8880	5000 (2)
manganese	3 mg/kg	61700	15300	898	1400	600 (2)
mercury	0.1 mg/kg	0.06B	0.07B	0.02U	0.03U	0.09 (2)
nickel	8 mg/kg	302	123	15.6	28.7	19 (2)
potassium	1000 mg/kg	2610B	2220B	601B	1090B	15000 (2)
selenium	1 mg/kg	0.20U	0.32B	0.54B	0.69B	0.39 (2)
silver	2 mg/kg	23.8	7.2	0.62U	1.1B	0.60 (2)
sodium	1000 mg/kg	903B	6340	85.7B	131B	6300 (1)
thallium	2 mg/kg	1.6B	0.98	0.61B	0.83U	9.4 (2)
vanadium	10 mg/kg	110	41.3	11.0B	19.8	80 (2)
zinc	4 mg/kg	78.4	199	27	42.1	60 (2)
cyanide	2 mg/kg	0.57U	0.66U	0.54U	0.82U	0

TAL ANALYTE QUALIFIERS	DEFINITION
B	Value is real, but is above instrument detection limit & below contract-required detection limit.
U	Analyte was analyzed for but not detected.
REFERENCES	
1	U.S. EPA. 1986. Statement of Work, Dioxin Analysis, Soil /Sediment and Water Matrices, Multi-Concentrations, Selected Ion Monitoring Analysis.
2	Shacklett and Buerngen Report. 1984. Background metal concentrations in Ohio soils